UNION CARBIDE

NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 4 — No. 9 May 3, 1973

QUESTION BOX

If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. *(Or telephone it in to your plant news representative . . . see page two). You may or may not sign your name. It will not be used in the paper if you so desire.*

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

(EDITOR'S NOTE: The following question is typical of a few received concerning the Safety Incentive Plan. The answer deals with the major points raised by these questions.)

QUESTION: I've just seen the March 15, 1973, issue of the NUCLEAR DIVISION NEWS and I feel I have to comment on the Safety Incentive article appearing in that issue. The article describes in detail the new safety program. I feel, however, that one point was omitted. I refer to the fact that under the "new" plan the maximum amount of money the employee would get is lower than in previous years, i.e., under the new plan the ORNL employee working in the Y-12 area would get a maximum of only $12.00. (This year the same employee working in the Y-12 area got $20.70 and the year before $19.00.) As you can see under this new plan the employee is losing approximately $8.00-10.00/yr. I know they said they would raffle off prizes (TV's, etc.) every 90 days, but I ask out of 2,000-3,000 people how many are going to win these "prizes" -- perhaps 30? I assure you there are a lot of people who have never won nor will ever win anything in raffles. HOW can this type of program be an incentive for safety when people realize that there is no chance or very little chance for them to get more than they did last year? Why put in any effort to be safe at all?

ANSWER: The purpose of the Safety Incentive Plan is to help create interest in working safely and to attract attention to the safety program in each installation in the belief that more interest and more attention will result in safer work habits by everyone.

The plan has been revised several times since its inception in order to stimulate a continuing interest in working safely and to provide for related publicity and safety promotional activities. The cost of the plan and the value of individual awards have varied from time to time.

The current plan was developed through the combined efforts of the safety people at all four installations after much thought concerning employee participation, possible periodic promotional events of interest to employees, and the overall result of stimulating attention to the safety program. It is believed that the drawing for prizes will create considerable interest, much like door prizes at a party or a meeting, and thereby contribute to safety promotional activities.

It is generally recognized that money alone is not likely to cause a person to work safely. Thinking about the safety aspects of his job will. Hopefully, the award plan is designed to stimulate this.

The reward for having worked safely is in avoiding physical suffering and in keeping our bodies whole and healthy. This is the best reason for each of us striving to work safely each day.

QUESTION: Teams that are competing in the Carbide Softball League are restricted to having only three players who participate in the City Softball League. The apparent reason is to keep one team from dominating the league. The fairness of this rule is debatable, but, nonetheless, it is there.

On the other hand, the basketball league is dominated by one team with four or five starters who play for a city team. The bowling leagues are dominated year after year by teams whose members all bowl in other leagues. Yet no restrictions are placed on the number of players in these leagues.

Why is softball singled out as being restrictive when nothing else is? Is anything being done about this?

ANSWER: Every attempt has been made to provide a nonprofessional, intercompany recreation program, especially in our league activities, that will be enjoyable and fair to all concerned. We realize that some employees are far better athletes than others. Therefore, to prevent these athletes from forming teams and dominating the leagues we have placed the questioned restrictions to prevent this in softball without denying participation to anyone.

An attempt has been made to do this in the basketball league; however, we do not have the same type guide to go by.

(Continued on page 8)

E. O. Lawrence award goes to ORNL's Weir

James R. Weir Jr.

James R. Weir Jr., Metals and Ceramics Division at Oak Ridge National Laboratory, has been selected as one of the five U.S. scientists to receive the Ernest O. Lawrence Memorial Award for 1973. The award was established in 1959 to perpetuate the memory of the late scientist inventor of the cyclotron and director of the AEC's laboratories now bearing his name at Berkeley and Livermore, Calif.

Weir's contribution to the field of atomic energy lies in the field of reactor structural alloys. A native of Middletown, Ohio, he received his B.S. degree in engineering from the University of Cincinnati and his M.S. from The University of Tennessee.

In 1955 he joined ORNL as a metallurgist and later served as group leader for metallurgy and then as assistant section chief and section head of the Metals and Ceramics Division.

He has been credited by experts in the field as the investigator most responsible for the development of corrective methods for overcoming the high-temperature embrittlement of stainless steel and nickel-base alloys resulting from neutronically-generated helium.

'Void swelling'

Weir was also one of the first investigators in the United States to recognize the phenomenom of void swelling in liquid metal fast breeder reactors. Void swelling is a neutron damage process in which small voids are caused in affected materials, making them swell. He took an early initiative to advise the AEC of the implications of void swelling to fast reactor design and operation. The investigations that he designed and is now directing at ORNL in the quest of understanding and solving the void swelling problem constitute one of the three major programs in the United States in this area of reactor materials technology.

Weir is a member of the Society of Metals and the American Association for the Advancement of Science. He is married to the former Lois Mattox. They live at 105 Davidson Lane, Oak Ridge, with their children David, Todd, Patrick and Scott. Another son, Bob, is in the U.S. Navy.

Other recipients

Other recipients of the E.O. Lawrence Award, according to the announcement from Dixy Lee Ray, chairman of the AEC, are: Louis Baker, Argonne National Laboratory; Seymour Sack and Thomas E. Wainwright, Lawrence Livermore Laboratory; and Sheldon Wolff, University of California, San Francisco. Wolff formerly worked at ORNL.

Recipients of the award are presented a gold metal, a citation and $5,000 in cash.

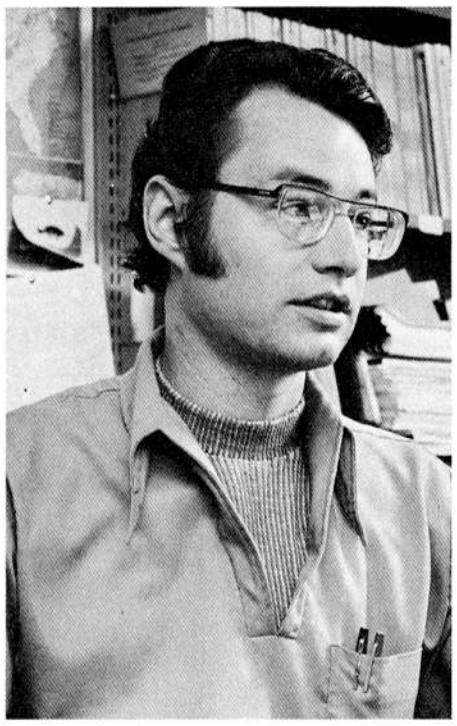
AECOP regrouping told by Commission

Reorganization of the long-range planning and analysis function of the Atomic Energy Commission and Union Carbide Corporation's Nuclear Division was announced recently by the AEC.

This reorganization will integrate the work of the Atomic Energy Commission Combined Operations Planning (AECOP) group into Union Carbide's Operations Analysis and Long-Range Planning Division at Oak Ridge. AECOP has operated as a separate entity, under the direction of John Shacter, since its establishment in 1966, and its staff has included personnel from Union Carbide and other AEC contractors, as well as from the AEC and other government agencies. Some personnel assignments have been on a rotational basis and these are expected to be discontinued.

AECOP's primary mission of conducting intermediate and long-term planning for combined special nuclear materials and weapons production operations will be continued under the Nuclear Division's Operations Analysis and Long-Range Planning Division. This realignment is expected to achieve closer coordination with the central Nuclear Division planning group during a period in which the long-range planning, particularly as related to AEC's uranium enrichment resources, is becoming increasingly important.

Thermal effects on aquiculture studied at ORNL



Charles C. Coutant, project supervisor of the Thermal Effects Program.

The Aquatic Ecology Laboratory (AEL), part of ORNL's Environmental Sciences Division, is called many names. Some of them include "the wet lab," "the fish hatchery" and "the fish tank building." What the AEL is called is not important, but its purpose is. Experiments are being conducted at the AEL to determine thermal effects on aquatic organisms.

The Atomic Energy Commission authorized construction of the AEL so that ecological questions raised about nuclear power plants could be answered. The principal objective of the studies is to determine the biological limitations which can be used as design criteria for power plant siting, construction and operation.

Charles (Chuck) C. Coutant is project supervisor of the Thermal Effects Program, which is conducting these studies. Before joining ORNL in 1970, Coutant conducted both laboratory and field studies on the effects of thermal discharges to the Columbia River ecosystem while employed by Battelle Memorial Institute, Pacific Northwest Laboratories.

Experiments conducted at the AEL were started in Building 2001, where most of the Environmental Sciences Division is located. The present location offers additional space and facilities for more precisely regulating temperatures.

Facilities deserved

The Laboratory consists of the main building, which has offices and houses the large experiment room; the service annex or pump house, which contains the controls and supports the large drums through which the water circulates; and six quarter-acre experimental ponds located in back of the main building.

The 50 x 100 ft. building has circulating water supplies of constant-temperature heated and chilled well water, and ambient-temperature well water. Twenty mixing valves are operated on a manual basis to blend these water sources to produce desired temperatures in tanks of fish or other aquatic organisms. The tanks, which hold up to 200 gallons of water, have temperatures ranging from 5 to 43°C. The automatic valve control will enable investigators to program experimental temperature fluctuations in the tanks to match natural temperature cycles created by thermal discharges from a power plant. The computer system will allow control of over 100 such experimental tanks.

Expandable experiment room

The experiment room was built so that it could be easily expanded. The right wall can be removed, as it gives no support to the roof of the building.

In addition to the 20 large circular tanks, the experiment room contains four compartmental rectangular tanks and four small artificial streams. The compartmental tanks are being used to test growth responses of fish at varying temperatures. The primary purpose of the artificial streams is to study acclimation of stream invertebrates. Screens are being mounted over the streams to contain the emerging adult stream organisms. Algae and other plants will be studied, and the rate of decay of leaves dropped into the streams at different temperatures will be determined.

Facilities are also available for simultaneous addition of chemicals for studies of interactions with fluctuating water temperatures.

The six outside ponds will be used for holding experimental stocks, for breeding purposes and for setting up field experiments.

Type of experiment

Some of the experiments which are currently being conducted include: survival of fish and other organisms at elevated temperatures; growth rates of fish throughout the range of tolerable temperatures - these studies also determine the best temperatures for aquiculture in heated water; predation rates on fish exposed to rapid rises or drops in temperature; preferred temperatures of fish, using temperature-sensing (sonic) fish tags developed by ORNL engineers; and the mechanical deformation of fish eggs and larvae as they pass through pumps and piping of condenser cooling systems.

The latter studies illustrate redirection of scientific talents at ORNL once devoted to reactor development. Hydraulic engineers, using experimental facilities designed to study particles flowing in the salts of the Molten Salt Reactor, are now doing similar studies to determine the physical design factors that will protect living "particles" as they pass through condensers.

Other staff members

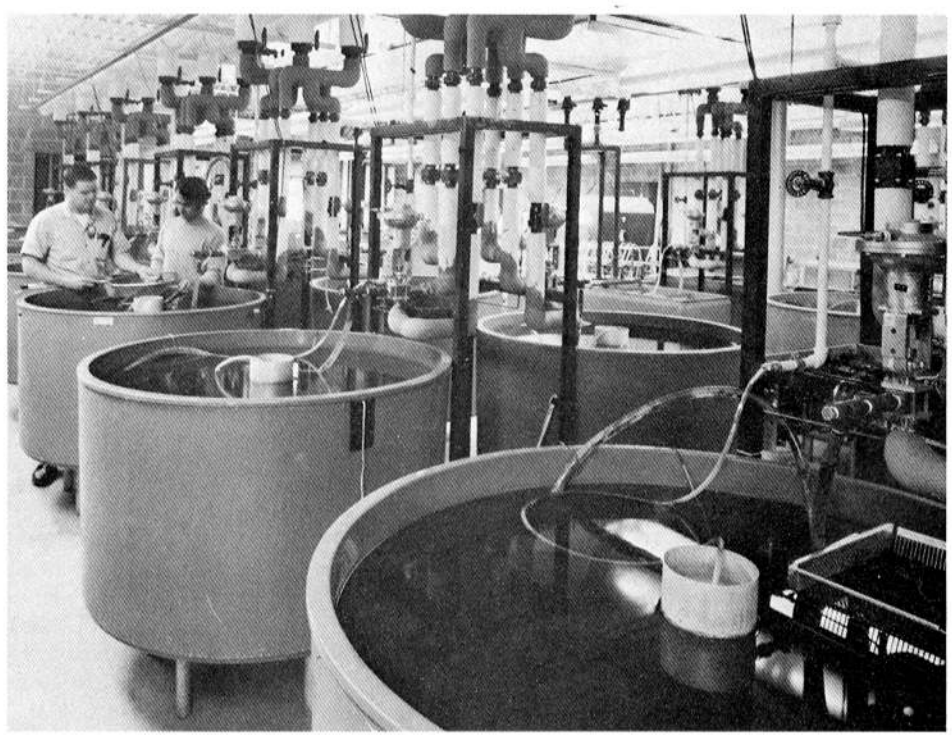
Other staff members involved in the Thermal Effects Program include Patrick Ryan, Jack S. Mattice, C. Phillip Goodyear, Carl W. Gehrs, Webster Van Winkle, David S. Carroll, David K. Cox, Joe W. Gooch and L.M. Stubbs.

The Aquatic Ecology Laboratory is the first facility of its kind to be built in this area. Data obtained from the studies conducted at the AEL will be available to other organizations upon request. The ORNL staff currently has cooperative information exchanges with the Tennessee Valley Authority, the Tennessee Game and Fish Commission, the U.S. Bureau of Sports, Fishery and Wildlife, the U.S. Environmental Protection Agency and the International Atomic Energy Agency.

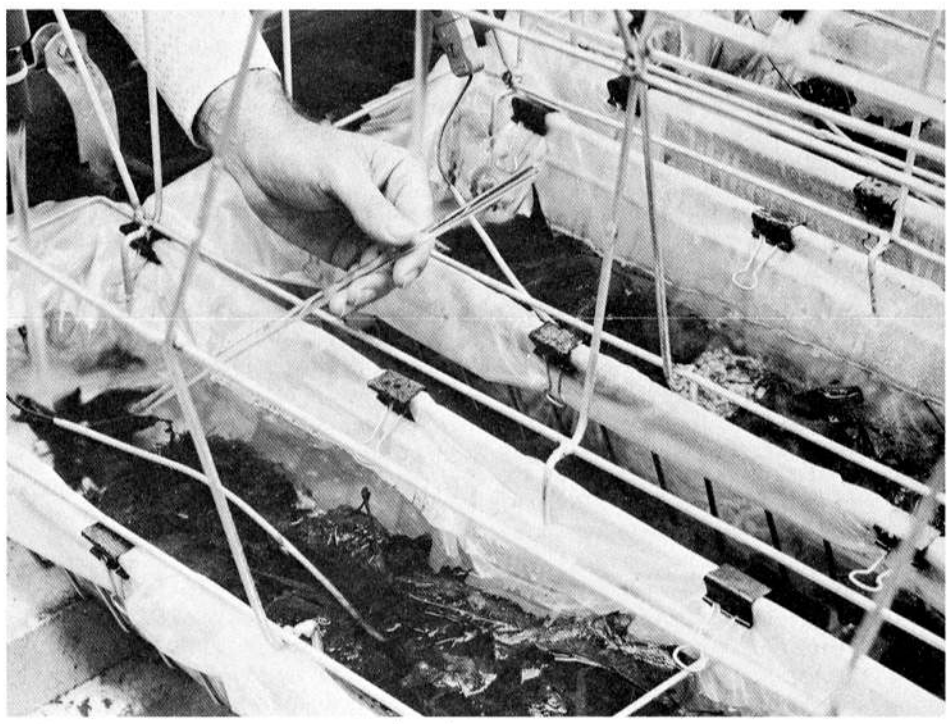
Coutant and his staff are also assisting AEC Regulatory in preparing environmental impact statements for power plant licensing under the National Environment Policy Act.

ALMOST HALF BUY BONDS

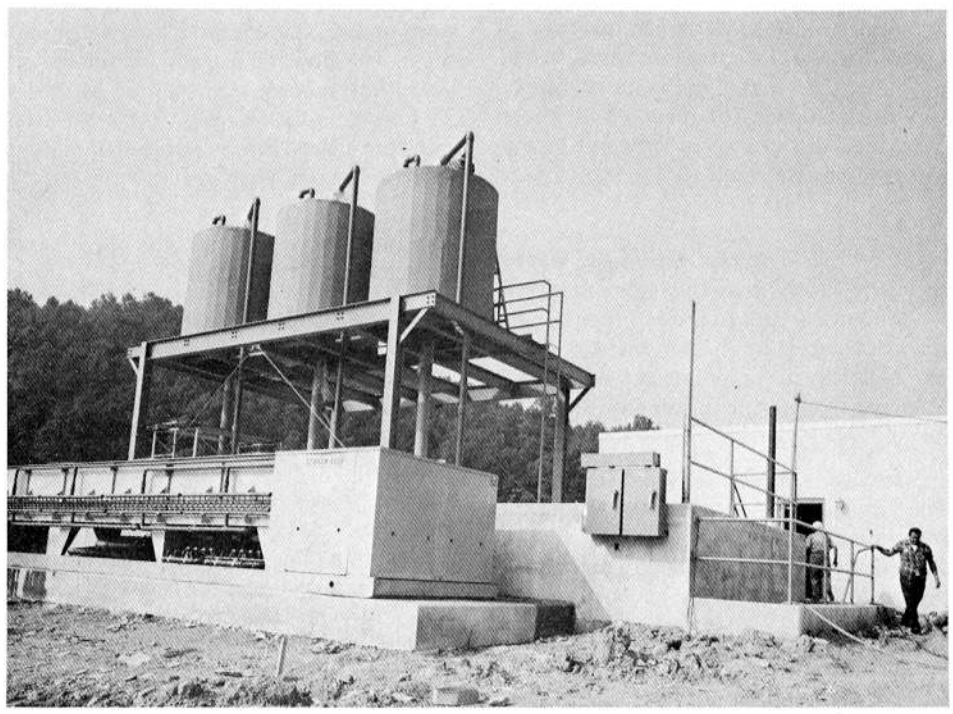
More than 49 percent of all Nuclear Division employees are saving through the purchase of savings bonds with payroll deductions.



NOW YOU SEE THEM . .—The large circular tanks are used to study fish and other aquatic life at the Aquatic Ecology Laboratory. The tanks hold up to 200 gallons of water, and have temperatures ranging from 5 to 43°C.



HOT ENOUGH? — David Cox (hand), technician in charge of the AEL building, measures the water temperature in one of the artificial streams. The streams will be used to study acclimation of stream invertebrates.



SERVICE ANNEX — The service annex is located next to the main building of the Aquatic Ecology Laboratory. It contains the controls and pumps. Drums through which the water supplies circulate are mounted on top of the service annex.

Four promotions announced at gaseous diffusion plants

Black Garrison

Johnson Brown

Four promotions are announced at the gaseous diffusion plants, three at Oak Ridge, and one at Paducah.

Clarence V. Black has been named a training supervisor at ORGDP. He came with Union Carbide in 1945.

A native of Cleveland, Ga., he is married to the former Pauline Sims. They have a daughter, Mrs. Sharon Ann Scoonover, in Newport News, Va. The Blacks live at Route 18, Garrison Road, Knoxville.

Dennis E. Garrison has been named a relief division shift supervisor at ORGDP.

He also came with Union Carbide in 1945. A native of Searcy, Ark., Garrison spent five years in the U.S. Army.

Mrs. Garrison is the former Irene Benson. They have a married daughter, Mrs. Martha Stevens. The Garrisons live at Route 20, Knoxville.

Cleamon Johnson Jr. has been promoted to a planner-estimator at ORGDP. Joining Union Carbide more than 11 years ago, he attended a trade school in Detroit before coming to Oak Ridge.

He and his wife live at Friedsville with their three children, Sharon, Cleamon Brian and Rebecca.

Frank Brown has been named a health physics technician at the Paducah Plant.

He lives at 1107 North 11th Street, Paducah, with his wife Mae Anna, and their children, Maurice, Frank II, Joe E., Melissa, Jada Marie and Sybill Ann.

Two ORNLers named to National Academy

Two scientists in the Biology Division of Oak Ridge National Laboratory have been elected to the National Academy of Sciences. They are Richard B. Setlow and William L. Russell.

Setlow is director of the University of Tennessee - Oak Ridge Graduate School of Biomedical Sciences and scientific director of the Biophysics and Cell Physiology Section. Russell is scientific director of the Mammalian Genetics Section.

Washington-based

The National Academy of Sciences is a Washington-based organization of distinguished scientists and engineers who are dedicated to the furtherance of science and its use for the general welfare. Although it was established by an act of Congress in 1863, the Academy is not a governmental agency. It is frequently called upon by federal government agencies to investigate and report on various scientific areas.

Setlow, who joined the ORNL staff in 1961, holds a Ph.D. degree from Yale University. His research involves investigating changes inside cells brought about by radiation and studies on the mechanism of cellular repair. He has authored many journal articles and is co-author, with E.C. Pollard, of a book entitled, "Molecular Biophysics." He and his wife, Jane, who also works in the Biology Division, live at 226 Outer Drive, Oak Ridge.

Well known conservationist

Russell has a doctorate degree from the University of Chicago. He joined the ORNL staff in 1947. Russell is well-known for his studies of the effects of varying doses of radiation on mice, and his work has influenced the AEC in its determination of standards for limiting radiation releases from nuclear power plants. In addition to being involved in the scientific life in Oak Ridge, Russell is founder and president of the Tennessee Citizens for Wilderness Planning, which advocates stricter strip mining control legislation. He is married to Liane, who is also a geneticist in the Biology Division. They reside at 130 Tabor Road, Oak Ridge.

The appointment of Russell and Setlow brings the number of ORNL scientists who are members of the National Academy of Sciences to five. The other three members are Alvin M. Weinberg, ORNL Director; Alexander Hollaender, ORNL consultant; and William Arnold, Biology Division consultant.

Next Issue

The next issue will be dated May 17. The deadline is May 9.

Paducah is first in line for safety award drawings

The Paducah Gaseous Diffusion Plant became the first of the Nuclear Division plants to pass its safety goal of the year, and since then, Oak Ridge National Laboratory and the Y-12 Plant have also passed the initial landmarks, to entitle employees in those parts to take part in the first drawings of the year.

Paducah needed 180-days without a lost-time injury; Y-12 needed 90; and ORNL required 120 days without a lost-time injury to participate in the new safety incentive program.

In mid-April Paducah employees gathered to draw for 31 winners. The following employees won awards in the first drawing: Earl E. White, a riding mower; Ben W. Doom and Bobby J. Bond, portable color TVs; John D. Harris and Fort R. Duley, stereo, AM-FM radios; Dudley L. Castro and Billie E. Jones, luggage; Don I. Maurer, multi-band radio; Clarence O. Hays, Bobby Smith and John W. Stearns, mixers; Lawrence E. Hayden, Clares A. Bean and Richard R. Mason, blenders; David R. Lockhart, Virgil D. King and Thomas C. Caylor, cameras; John S. Thurman, hedge trimmer; Elmer C. Breidert, auto stereo tape player; Glenn C. Vancil, binoculars; Billy Dunn, Freeland E. Smith and William M. Moffitt, digital clock radios; J.C. Collins and John T. McWaters, tape players-tape recorders; Thomas M. Hines and John P. Boutwell, electric drills; Vernon B. Finley and Kenneth W. Carpenter, oven-broilers; James D. Garrison, electric saw; and M. Eugene Rollins, trolling motor.

Drawing same in Y-12

Y-12's Central Safety Committee has announced their awards for the first period, and they are being accumulated at the Safety Department. The drawing will be held when the awards are all in.

The selection committee at ORNL has been busy selecting gifts for their awards.

Y-12's Central Safety Committee has appointed the following to serve for their respective division, as award committee members: Jeannette McCown, Metal Preparation; Cory F. Wallace, Assembly; Charles E. Robinson, Maintenance; George S. Stubbs, Fabrication; George R. Beasley and Charles R. Lively, Shift Superintendents and Utilities; Jesse B. Brabson, Product Certification; Victor Henegar, Product Engineering and Scheduling; Hoyt A. Eason, Technical Services; Florence C. Olden, Engineering; Bradley Napier Jr., Development; Blanche H. Miller, Administration; Donald R. Stallions, Biology; E.M. Lees, Reactor; and Randall S. Edwards, Thermonuclear.

Y-12 Awards

The committee has announced that not more than a quarter of the funds allotted for the awards will be expended on items between $300 and $500; and not more than a quarter of the money will be spent on items between $100 and $300; and not less than half of the fund to be spent on items worth less than $100.

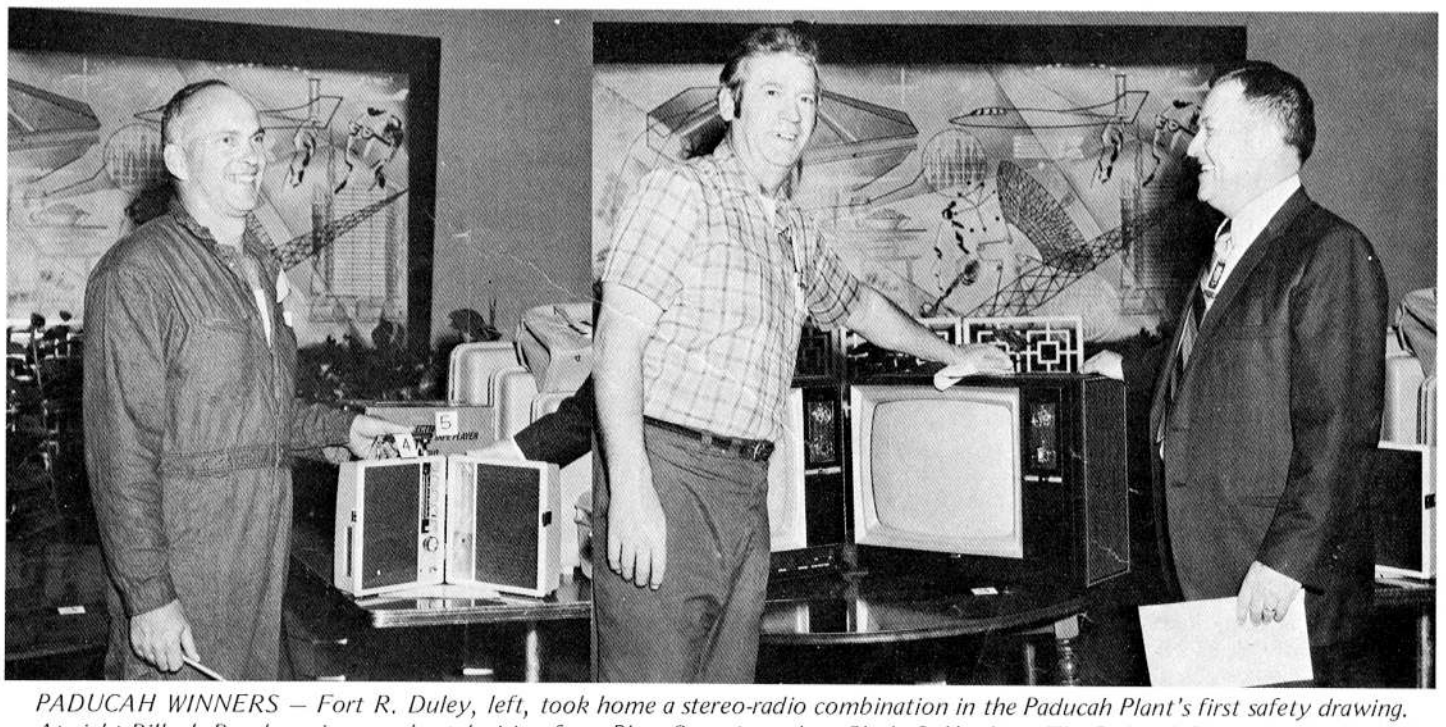
The purpose of the new safety award program is to stimulate interest on the part of all employees in making safety a way of life both on and off the job throughout the entire year.

Cherokee students visit ORNL sites

Forty-five 7th and 8th grade students and three faculty members from the Cherokee School in Cherokee, visited ORNL recently.

Earl J. Nash, coordinator of the Affirmative Action Program, and Ron Hart, consultant at the University of Tennessee - Oak Ridge Biomedical School, initiated the visit. The primary purpose of having the students visit Oak Ridge was to expose them to the scientific atmosphere which, hopefully, will encourage them to pursue studies in the field of science after they reach high school and college.

The program consisted of a tour of the American Museum of Atomic Energy in Oak Ridge, lunch at the ORNL cafeteria, tours of the Graphite and Oak Ridge Research Reactors, and a visit to the Biology Division at Y-12. Several simulated experiments were set up in the Biology laboratories for their benefit.



PADUCAH WINNERS — Fort R. Duley, left, took home a stereo-radio combination in the Paducah Plant's first safety drawing. At right Billy J. Bond receives a color television from Plant Superintendent Clyde C. Hopkins. The Paducah Plant was the first of the three facilities to pass the necessary milestone in safe hours worked to be eligible for drawings.

U. S. Savings Bonds prove highly effective way to save

More than 10,000,000 Americans are buying U.S. Savings Bonds through payroll deductions, representing some 40,000 companies.

Last year, Nuclear Division men and women saved some $2,000,000 through payroll deductions. This safe, simple and easy way to save attracts more and more employees, with almost half of all employees on automatic payroll deductions.

FDR bought first

It was 32 years ago this week that President Franklin D. Roosevelt purchased the first Series E U.S. Savings Bond, initiating a program which today accounts for 23 percent of the public sector of the national debt. The sale of Treasury Bonds dates back to 1776 and bond drives were important during the Civil War, the Spanish-American War and World War One. But the Series E Bond represented a new and lasting departure.

In the postwar years, even without the same patriotic pressures, sales of Savings Bond have shown that the habit of saving "took" with millions of Americans. Today, the amount of Series E and H Savings Bonds held by the public stands at a record total of more than $58 billion. The Savings Bond concept is still basically the same, but there have been changes. The current-income Series H Bond was introduced in 1952, and various attractive new features have been added to the Bond Package.

The U.S. Savings Bond today remains what it started out to be. It is a highly popular piece of practical patriotism, which represents a sound saving habit, plus a significant factor in stablizing the nation's economy. The current rate of interest is five and one-half percent, with the one-half percent actually a bonus, when held to the improved maturity of five years, 10 months.

Ward Foster, general chairman for the current drive, points out that many departments already have 100 percent subscribed to payroll deductions. Four plant activity is being handled by plant chairmen in the three Oak Ridge installations, in Paducah, and for the general staff.

William E. Schimmel is chairman for the General Staff; John D. Nicol for the Oak Ridge Gaseous Diffusion Plant; John A. Auxier from the Oak Ridge National Laboratory; and James M. Seivers for the Y-12 Plant.

Interest yields on U.S. Savings Bonds are guaranteed. They have been increased seven times since the first bond was offered for sale.

Savings Bonds, however, offer more than automatic and safe accummulation of money through Payroll Savings and Bond-A-Month Plans, The interest is not subject to State or local income or personal property taxes. In effect, Bond owners earn more than the state rate. The Treasury guarantees free-of-charge replacement of lost, stolen, damaged or destroyed Bonds.

SET Y-12 PLANS — Y-12's Bond drive chairmen, representing each division in the plant, gathered last week to lay plans for the 1973 drive. Standing from left are James M. Seivers, Y-12 chairman; Jo Ann Isham, Metal Preparations; William D. Cain, Fabrication; Charles J. Harris, Product Certification; Mack Sparks, Technical; Harry Templeton, Superintendents; and John L. Reagan, Maintenance. Seated, clockwise, are Jack Terrell, Engineering; Campbell R. King, Industrial Relations; Richard Spears, Assembly; Stephen C. Curtis, Accounting and Budgets; Wesley Smith, Development; Jack D. Lindsey, Materials and Services; Jackie Ward, Shift Superintendents and Utilities; and Bill Hicks, Industrial Relations.

You can't lose U.S. savings bonds

There are all sorts of bizarre tales about the indestructibility of U.S. Savings Bonds. Tidal waves, earthquakes, tornados, floods, theft, or just plain loss often appear as cases in point.

When you purchase through Payroll Savings, your bond serial numbers are kept on file. If you do not receive the bond in the mail, or lose it after getting it, Payroll has a record of it.

First, after the loss is reported, payment on the bond is stopped, just like you would stop payment on a check. Then the proper form is filled out and the bond is re-issued, or your money is refunded.

Payroll also has a record available where you can keep up with your own serial numbers.

In any event, YOU CAN'T LOSE when you purchase U.S. Savings Bonds.

ADDED RETIREMENT FUNDS

Systematic savings through buying bonds through payroll deductions can mount up automatically. After retirement, you can cash the matured bonds whenever the need arises.

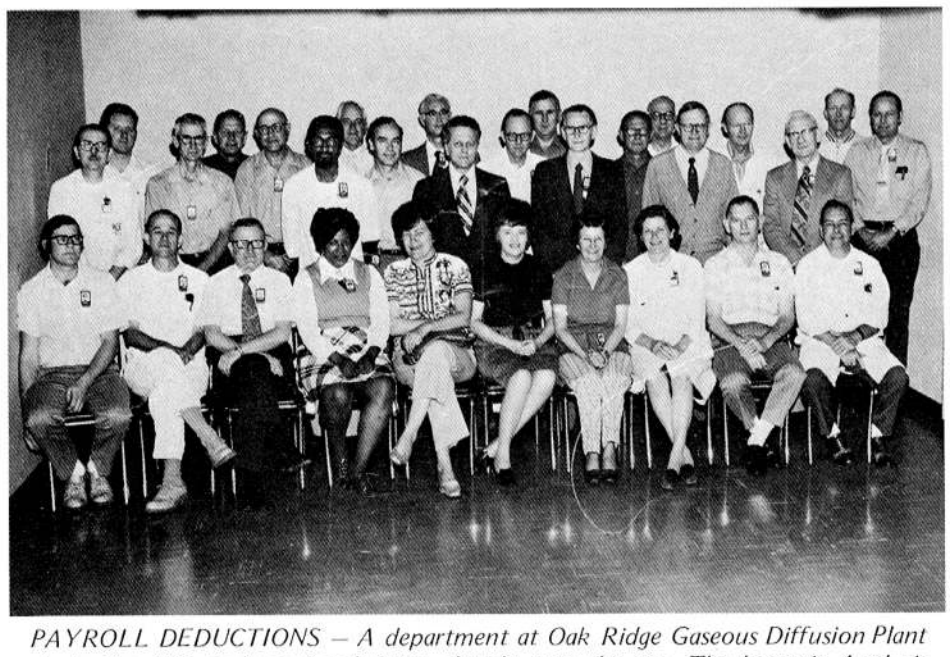
For college education

Putting aside cash for that extra money required for college expenses is simplified by a payroll plan, purchasing U.S. Savings Bonds. Here's how it works:

Purchase E Bonds in your child's name with a parent as beneficiary (not co-owner). At the end of the first year, file a Federal income tax return in the child's name. This establishes "intent", and no further returns need be filed (or tax paid) as long as the child's total income does not exceed the amount of his personal exemption. Thus, when Bonds are cashed to meet college costs, all accrued interest is free from Federal tax. Retain a copy of tax return as proof of intent.

The second method is the same in purchasing, as above. Wait to file a tax return until the child begins to cash the Bonds to pay college expenses. A return would then be filed by the child each year, reporting the full amount of interest on redeemed Bonds as income. As long as total annual income does not exceed the amount of his personal exemption, no tax will be due.

Under either method, the child's Social Security number must be included in his tax return, as required by IRS.



PAYROLL DEDUCTIONS — A department at Oak Ridge Gaseous Diffusion Plant starts the U.S. Savings Bond Drive already over the top. The Isotopic Analysis Department at ORGDP is already saving 100 percent on payroll deductions, a good example for other departments.

For retirement 'extra'

U.S. Savings Bonds make ideal 'extra cash' after your retirement. Here's how they work:

You purchase E Bonds during your working years at a rate to fit your income. After retirement, cash the Bonds as needed to supplement income, reporting the interest as income on your Federal tax return. (Your interest is exempt from all state or local income taxes!) Income is usually lower in retirement, and with the double tax exemption after age 65, taxes are greatly reduced or eliminated entirely.

Another method is to purchase E Bonds during working years at a rate fitted to income. At retirement, exchange the E Bonds for H Bonds which pay interest semi-annually by Treasury check. The accumulated interest on the E Bonds is applied to the purchase of the H Bonds with the privilege of further deferring tax liability on E Bond interest until H Bonds are cashed or mature. Thus the tax money you still owe on the E Bond interest enables you to earn more money in H Bond interest.

DIVISION Retirees

Robertson Jordan

Beeler

Four ORNL employees retired May 1.

Roy O. Beeler was a guard in the Laboratory Protection Division. He and Aline, his wife, live at 3616 Essary Drive, Knoxville. Beeler plans to fish, plant a garden and do a little traveling after his retirement.

Walter H. Jordan, formerly an assistant director in the Directors Division, came to work at ORNL in 1946. He received the Ph.D. degree from the California Institute of Technology. Prior to coming to ORNL, he taught physics at the University of South Dakota and worked at the Radiation Laboratory of the Massachusetts Institute of Technology on the development of radar. He and wife, Clara, and daughter, Ann, live at 881 W. Outer Drive, Oak Ridge. Ann works part-time at ORNL and attends The University of Tennessee. Following retirement from ORNL Jordan plans to continue teaching part-time at The University of Tennessee and remain active on the Atomic Safety and Licensing Board for AEC.

Charles E. Kaplan was an engineer in the Inspection Engineering Division. He had worked for Union Carbide since March 1951. The Kaplan home is at 131 Orchard Road, Norris.

Hugh E. Robertson is taking early retirement from the Reactor Chemistry Division. Originally from Sevier County, Robertson attended Lincoln Memorial University and came to work for Carbide in 1951. He likes to hunt and fish and attend sports events. He and Ruth, his wife, live at 1547 C, Coleman Road, Knoxville.

Newman

Raymond D. Newman, a supervisor in ORGDP's Electrical Maintenance, is set for retirement at the end of May.

He joined Union Carbide in 1944, and lives at 198 Oak Road, Norris.

$23 million seen in toll enrichment for first quarter

More than $23 million in toll enrichment sales were recorded at the Oak Ridge Gaseous Diffusion Plant during the first quarter of 1973.

During the first three months of the year, approximately 390,000 pounds of enriched uranium were shipped for use in nuclear reactors in Japan, Spain and Switzerland, and the states of Connecticut, Florida, Iowa and North Carolina.

Under the toll enrichment program, privately-licensed owners bring their uranium to a gaseous diffusion plant for enriching on a toll basis. Customers are charged for the services required to separate from natural uranium the desired percentage of the uranium-235 isotope, usually between 2 and 3 per cent.

The Oak Ridge Gaseous Diffusion Plant, and one in Paducah, Ky., are operated by Union Carbide Corporation's Nuclear Division for the U.S. Atomic Energy Commission. The Paducah facility, as well as one in Portsmouth, Ohio, also participates in the uranium enrichment program.

ORNL BOWLING

The C League championship went to the Damagers, who won the season's first half, then capped the second half, necessitating no roll-off. The champs paced the final night, rolling a series of 3065.

The E League's second half went to the Woodchoppers. The Dodads rolled a 3066 in the last night of rolling.

The Pockets picked up first place in final rolling for the A League recently, as the Half Frames took second place.

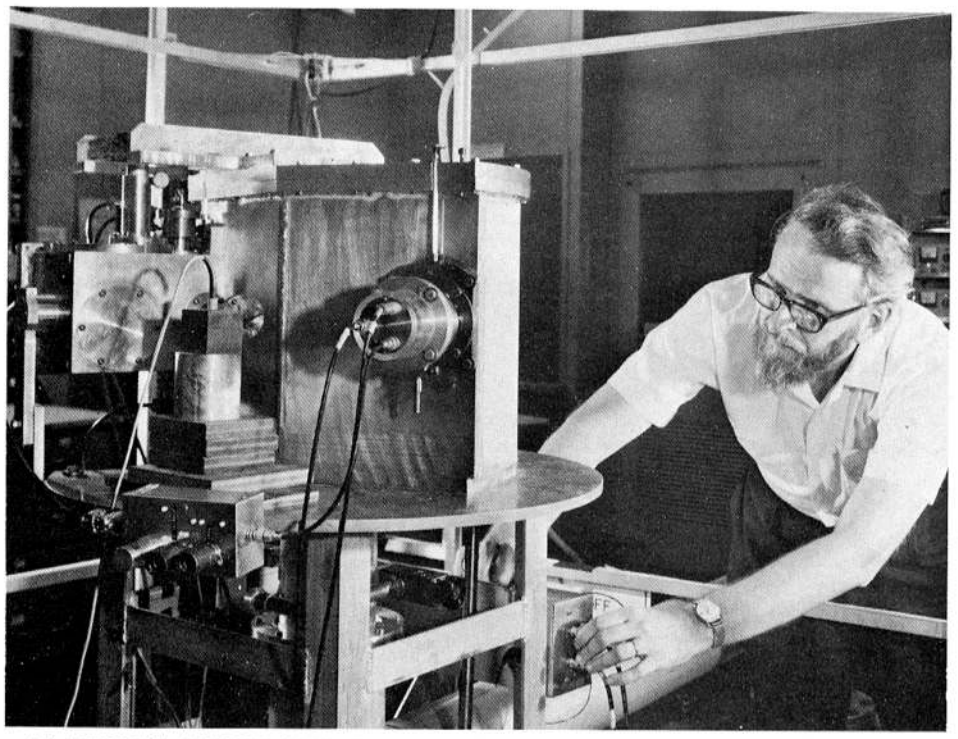
The Mousechasers stand four points out front in the ORNL Ladies' League, away from the Bowling Aces. They hold the record thus far with a 2467 handicap series.

Foreign travel

Several ORNL staff members were on foreign travel status recently.

Edward G. Struxness, Environmental Sciences Division, attended meetings of the Main Commission and Committee Four of the International Commission on Radiological Protection in Brighton, England, April 8-14.

Charles D. Scott, Chemical Technology Division, presented an invited paper on "Use of Combined Microreticular and Pellicular Ion Exchange Resins in the High-Resolution Separation of Complex Biochemical Mixtures," at the First International Symposium on Column Liquid Chromatography in Interlaken, Switzerland, May 2-4.



ELECTRON SPECTROMETER — Thomas A. Carlson, Chemistry Division at ORNL, works with his electron spectrometer. Carlson uses electron spectroscopy to carry out research by combining the disciplines of chemistry and physics.

T. A. Carlson chosen to co-edit Journal of Electron Spectroscopy

Thomas A. Carlson, Chemistry Division at Oak Ridge National Laboratory, has been chosen co-editor of the **Journal of Electron Spectroscopy**. The newly-established journal is a result of the growth of interest in electron spectroscopy over the past few years.

Carlson is one of the pioneers in high resolution electron spectroscopy in the United States. He has used electron spectroscopy in research ranging from basic studies in chemical bonding to the use of x-ray photoelectron spectroscopy in pollution analysis. He has spent a major portion of his time at ORNL exploring how the methods of physics can be used to solve chemical problems.

Carlson came to work at ORNL in 1954. He holds a B.S. degree from Trinity College and M.S. and Ph.D. degrees from the John Hopkins University. Carlson is a member of several professional organizations including the American Chemical Society and the American Physical Society. Earlier this year he was elected to fellowship in the American Physical Society. Carlson has authored many publications, and has given lectures on his work throughout the United States and in several foreign countries.

C.R. Brundle of Bradford University, England, is the other editor of the Journal. The first volume is scheduled for completion in July.

Y-12 BOWLING

The Mixed League crown went to the Rollers last week, as Charley and Ann Lively and Wanda and John Sewell rolled past the Alley Cats. The Rollers had captured the league's first half . . . then tied for the second half with the Cats. They defeated the Alley Cats by some 260 pins for the second-half roll-off. No further roll-off was required.

The Bumpers won the Classic League's last half, and faced the Has Beens in a big roll-off for league championship.

The Mini Strikes continue their lock on the top rung of the C League, with the season fast drawing to an end.

22 CALIBER PISTOL LEAGUE

Scratch highs for the season went to E.T. Johnson, E.A. Scott and T. Lemmons. Handicap honors went to L. Weston, J.M. Miller and R.H. Ward.

COMPANY SERVICE 20-25-30

Blakely Winton

J. Paul Blakely started work for Tennessee Eastman in May, 1943. He is currently industrial cooperation coordinator and foreign visitor officer in the Information Division. Blakely has a B.S. degree in chemistry from Washington & Lee University and a M.B.A. degree from The University of Tennessee. In addition to his duties at ORNL, Blakely is chairman of the Status and Recommendation Committee of the Nuclear Technical Advisory Board of the American National Standards Institute and president of the Y-12 Credit Union. He and his wife, Tinque, live in Concord. Mrs. Blakely was formerly a teacher in the Oak Ridge school system.

Melbourne L. Winton, Reactor Division, came to work for Tennessee Eastman from Bushnell, Ga. He holds a degree in education from the University of Florida and one in electrical engineering from Georgia Tech. In his spare time, Winton enjoys reading and hiking. He and Mary Louise, his wife, live at 100 Oneida Lane, Oak Ridge.

RECREATIONOTES

SACK-RACING EVENT — The Engineering picnic, set for June 2 at the Clark Center Recreation Park, features a sack race for the children. Another feature will be a variety show which includes the dance band of Hull's Hackers, singer Judy Hembree, a square dance exhibition and Austinini, the great magician.

ORGDP BOWLING

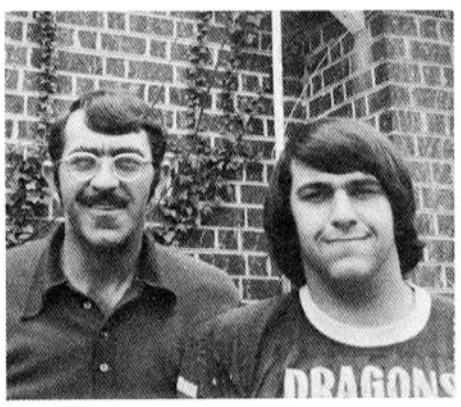
The Mix-Ups edge the Planners out from first place in the Wednesday League, only by a half point. Dick Riker rolled a 268 game, and Jim Conner posted a 645 series to tie the league action.

In the Tuesday League the All Stars were easy winners, miles ahead of the City Slickers. The All Stars' Gibson starred in final action, rolling a single of 213, and series of 575.

The Pay-Offs are still out in front in the ORGDP Women's League. Elaine Griffies rolled a 216 recently to pace the action.

PARK CAMPING

Only a few outlets are available for trailer connections in the camp ground at the Clark Center Recreation Park at present. This results from work being done to update all electrical equipment to meet OSHA requirements. The work should be completed shortly.



LIKE FATHER — "Like father, like son," says Don Vandergriff, Y-12's Alpha Five West Shop, left, as his son David signs a grant-in-aid scholarship to play football at Northeast Louisiana University. Dave, a tackle, was captain of the Clinton Dragons his senior year. Don, himself, played football at Clinton some time ago. Young Vandergriff was recruited by Y-12er Bill Elliott, who is also looking at other area youths.

ENGINEERING PICNIC

The Engineering Divisions in Y-12 and ORGDP have reserved the Clark Center Recreation Park June 2 for the big picnic, which gets underway at 1 p.m.

Dinner will be served from 5 to 6, but before that there will be lots of action for both young and old. The Hull's Hackers, a dance band, will be on hand; Judy Hembree will sing and there will be a square dance exhibition. The Great Austinini will be there with his magic act.

There will be softball, a hole-in-one contest and all sorts of other things. For the younger set, there will be a peanut hunt, a sack race, balloon race, egg toss and a tug of war.

The committee advises attendants to bring their own lawn chairs.

CARBIDE VOLLEYBALL

The Pack barely won the Volleyball League race, edging out The Hawks by a mere one game. The only game they lost was to the second-placed team. In third place fell The Gang.

Final standings follow:

Team	W	L
The Pack	58	2
The Hawks	57	3
The Gang	51	9
Taxi Squad	49	11
The Committee	46	14
Old Men	39	21
Anti Quarks	37	23
Jokers	35	25
Y-12 Old Men	35	25
Electric Bananas	30	30
Radphys	28	32
Quarks	26	34
Bawlers	22	38
Bombers	21	39
Raiders	20	40
Over-the-hill Gang	19	41
Benthics	18	42
Spikers	12	48
Phoenix	10	50
Playmakers	8	52
Sloths	8	52

A good memory is the key to all success.

ALL CARBIDE BOWLING

Bill Ladd, Y-12, captured the Carbide bowling title, duplicating his win in the recent State tournament to become the undisputed champion of the hardwood in these parts. His 1858 scratch all events score gave him an average of 206 pins plus per game!

J. Sewell Brown, Y-12, led the pack in handicap scoring with a 1929, followed by ORNL's Frank Kuhn with 1914.

With 65 men's teams in the competition, the Cross Footers from ORGDP totaled 3020 to lead the field. The Y-12 Rounders placed second with 3019, and the Fowl-Ups, also from Y-12, placed third with 2995 . . . all handicap scores. The Rounders were first place winners in scratch scoring, with 2747.

Women's team

The top women's team was the Pay-Offs, with a 2930 handicap score. The Up-Towners up-staged everyone else and placed second with 2912. Both teams are from ORGDP. The Up-Towners were high in scratch bowling, with 2522.

Men's doubles were swept by George Bailey and Lloyd Wyatt, from Y-12. Their 1371 led the troops, while their fellow Y-12ers, Harold Stewart and Fred Hammond placed second with 1301. Bob Carmack and Ben Miller, also from Y-12, came in third with a 1294. J. Sewell Brown and Sewell H. Brown had high scratch totals of 1195.

In women's doubles, it was Linda Burnett and Jane Williams, 1275, from Y-12. Patricia Hunsicker and Elizabeth Phipps, from ORNL, placed second, with 1221; and Judy Miller and Faye Fletcher, ORNL, took third place with 1212. Scratch honors went to Vernice Clower and Helen Hobson, ORGDP, with 1025.

Mixed doubles

In mixed doubles, it was Irene Carmack and Joe Morgan, Y-12, with 1278. Esther and Harold Soard, Y-12, came in second with 1273; while Martha Roberts and Stan Finch, ORGDP, placed third with 1272. Ruby O'Kain and Bill Ladd, Y-12, came in first place with scratch scores of 1121.

Linda Burnett, Y-12, fired a 703 to win women's singles. Mary Ellen Smith, General Staff, took second place with 691; while ORNL's Carolyn Vaughn came in third place with 645. Mary Ellen Smith was high scratcher with 619.

In Women's all events, it was Elizabeth Phipps, with a 1907; Mary Ellen Smith, 1898; and Linda Burnett, 1892. Jane Mook, ORNL, captured scratch honors with a 1886.

Tie for men highs

Men's singles honors went to Don Forrest, Y-12, and Paul Clabough, ORGDP, who tied with a 691. Odie Tidwell, ORNL, scored a 682; while Clyde Craven, Y-12 took a 679. Bill Ladd led the scratch scorers with a 661.

A special preserverance award should go to ORNL's Fred Hartman. His doubles partner had to withdraw because of a broken toe some three days before they were set to bowl. A replacement broke his hand and was forced to withdraw a few hours before the event. Up came Hartman with a third partner. However, Lady Luck was not with him again. Somebody picked up his bowling ball by mistake, and he was forced to roll with a strange ball. His singles and doubles proceeded without incident.

A considerable amount of volunteer work was necessary to plan, schedule and direct a successful tournament as large as this one. Bill Hackett, as chairman of the 1973 tournament, paid special thanks to Mabel Tyer, Walt Joest, Dorbra Lee, Judd Kahn, Vernice Clower, Charlie Hale and Barbara Hackett, for their untiring aid in scheduling, scorekeeping, checking scores, and countless other thankless jobs that had to be done. "For their help, and the help of many others," Hackett said, "bowlers from all three Oak Ridge plants are extremely grateful."

ARCHERY LEAGUE

The final match of the Carbide Indoor Archery League was held recently, and the high handicap score in free style firing went to Phillip Goodyear.

Bare bow firing honors went to Paul Lickliter, Hubert Prewett, Dwayne Free, E.G. Richardson and Cecil King, all in that order.

A SHIFT FISHING RODEO

A Shift (from Y-12) held a fishing rodeo at Bayside Dock recently, and R. A. Spainhour took first prize for a crappie. Lon Hendrickson caught the biggest bass. Other winners were the J.R. Robinettes, John Harber, R.C. Murphy and F.O. Sweeten. L.J. McDonald and O.R. Chambers took dock prizes.

Tee-Off Time Application for May 19

(Check Appropriate Plant)

☐ ORGDP – WALLACE HILLS GOLF COURSE
☐ ORNL – WHITTLE SPRINGS GOLF COURSE
☐ Y-12 – GATLINBURG GOLF COURSE _____ Check
2 Carts

_____ LEADER _____ _____
Phone Bldg.

_____
_____
_____
Time Preferred

COMPLETE AND RETURN TO YOUR RECREATION OFFICE

Entries must be received prior to drawing on May 16, 2 P.M.

ORGDP—Building K1001—C-Wing—MS 122
ORNL/Y-12—Building 9711-5

Tee-off times for all tournaments will be drawn on Wednesdays prior to each Saturday's tournament. Other than at Gatlinburg, golfers are responsible for reserving their own carts by contacting the pro shop following drawing for tee-off times.

The Medicine Chest

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)

By T. A. Lincoln, M.D.

Q: "What is fibrillation of the heart?"

A: Fibrillation is a continuous and completely disorganized contracting of the heart muscle. Fibrillation of the upper receiving chambers, called atrial fibrillation, is not fatal since a coordinated pumping action by the atria is not absolutely essential. These chambers fill with blood coming back to the heart, either from the rest of the body into the right atrium or from the lungs into the left atrium. They hold the blood until the tricuspid and mitral valves open. It is then pushed into the ventricles by the healthy atria or it flows more or less passively when the atria are fibrillating. The valves then close, the powerful muscles of the ventricles begin to contract, and pressure builds up quickly. The aortic and pulmonary valves open and the blood rushes out, either to the lungs or to the rest of the body.

Continuous fibrillation of the ventricles causes sudden death unless it is stopped and converted to a regular rhythm. Defibrillation is now often performed by nurses in coronary care units in hospitals. If a heart attack victim can have mouth-to-mouth resuscitation and closed chest cardiac massage applied within two to four minutes after the onset of ventricular fibrillation and then be defibrillated as quickly as possible, he may survive.

Atrial fibrillation may be caused by heart disease itself or by metabolic or toxic conditions outside of the heart, such as hyperthyroidism. It is often episodic and can frequently be controlled by drugs. In some refractory cases where overall heart function is sufficiently impaired, defibrillation (called cardioversion) using an electrical countershock is now often performed.

Ventricular fibrillation usually occurs during a serious coronary heart attack, although it is also the mechanism of death in electrocution.

Q: "Why do some people with high blood pressure or heart disease have to follow a low salt diet and others don't?"

A: More people with either hypertension or heart disease should be on a low salt diet but patient cooperation is often poor so physicians are conservative in using it. Many heart patients are so conditioned to adding salt to their food that they refuse to stop until they have alarming symptoms. Patients who have heart failure soon understand that indiscretion with salt can lead to severe shortness of breath. Anyone who has survived an episode of acute heart failure during the night is not hard to convince to give up salt and go on a low sodium diet.

The principal reason why there is still a choice for many people is the effectiveness of various diuretic medications. These cause the body to excrete sodium in the urine at a much accelerated rate. If all excess sodium can be gotten rid of this way, reducing intake is less important.

Sodium holds water in the body. Excess water means an increase in the volume of blood the heart has to pump. Sodium also plays a primary role in some types of hypertension so restriction is necessary to get adequate control of the pressure.

Americans eat entirely too much salt. We don't discourage our kids from eating tremendous quantities of peanuts, potato chips, and miscellaneous salted snacks. Also, the ritual of salting our food before even tasting it, which we teach our children by example, makes it extremely difficult for them to give up salt later in life when their lives may depend on it. If there is a family history of high blood pressure and heart disease, encouraging moderation in salt intake during childhood makes abundant good sense.

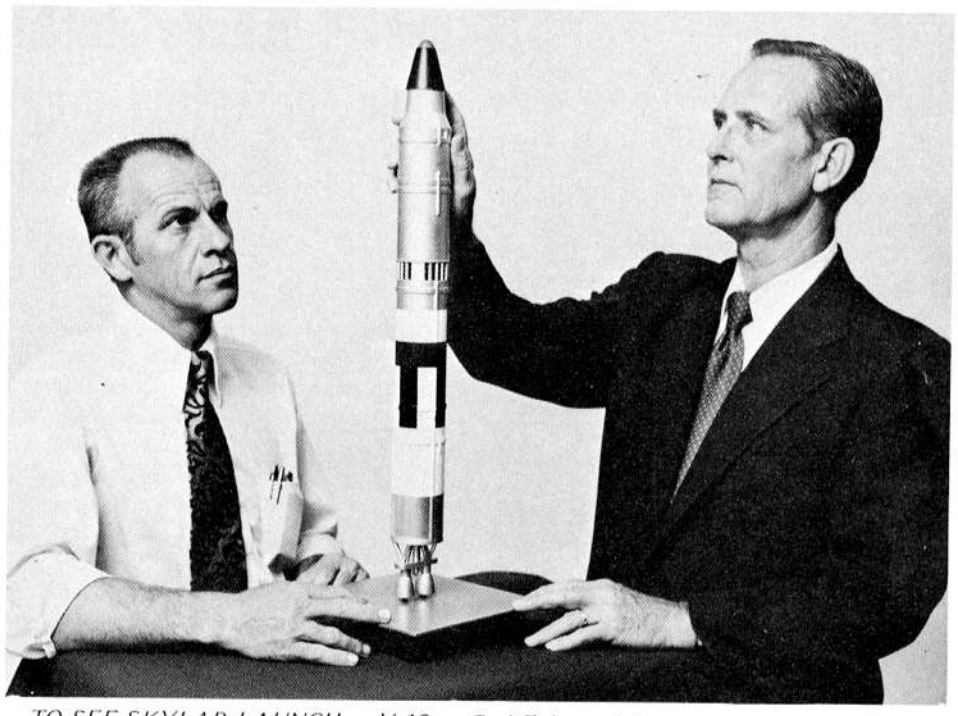
Q: "The rectal examination done during a periodic physical examination is certainly unpleasant. I understand it is not effective in finding cancer of the rectum anyway, so why do you doctors continue to insist on it?"

A: It is true that it is not particularly effective in finding cancer of the rectum, simply because the finger isn't long enough. The proctoscopic or the sigmoidoscopic examination is much superior. Nevertheless, it is possible to detect a cancer in the anal canal and lower rectum by a digital examination.

Also, don't forget the prostate. It is subject to infections, enlargement and, of course, cancer. In order to have a chance for a cure of cancer of the prostate, one has to find it long before it causes symptoms. The detection of a hard nodule on the prostate during a routine examination can lead to lifesaving surgery. There are several people now at work for the Nuclear Division who owe their lives to staff physicians who insisted on performing a rectal examination.

ALIVE AND WELL

There's one number the American Cancer Society just loves — 1,500,000. That's the number of Americans alive today who are cured of cancer. And, their ranks could be even greater, says the Society, if everyone understood the importance of an annual physical checkup including cancer tests.



TO SEE SKYLAB LAUNCH — Y-12ers Carl Zehner, left, and C. Lamar Matthews have been invited to NASA's Mission Control in Houston, May 14-15, to view the launchings of Skylab 1 and 2. Since the Skylab Project will have no equipment fabricated at the Y-12 Plant, the invitation is considered a special honor. Zehner, an engineering technician, and Matthews, a special project engineer, played strong supporting roles in the preparation of equipment for the Apollo moon landing missions. They are seen with a prototype of a Saturn rocket above.

Y-12 PLANT

RIDE or will join car pool from Broadacres subdivision, Powell, to Bear Creek Portal, day shift. N.J. Forness, plant phone 3-7258, home phone Powell 947-8009.

RIDE or will join car pool from Claxton community to North Portal, straight day. T.C. Hale, plant phone 3-7558.

LITTLE MISS — Lori Beth Prater is "Little Miss Roane County for 1973." Lori was selected from 72 contestants participating in the pageant which was held recently in Kingston. Her father, Donald G., is in the Instrumentation and Controls Division at ORNL. The Praters live at Route 3, Riverbend Drive, Kingston.

ORNL

CAR POOL MEMBERS from vicinity of Norwood and Clinton Highway, Knoxville, to either portal, 8 a.m. shift. Jack Posey, plant phone 3-1708, home phone Knoxville 947-3261.

TWO CAR POOL MEMBERS from vicinity of Waddell, West Outer or Pennsylvania to East or North Portal, 8:15 shift. Tom Burnett, plant phone 3-6929 or Oak Ridge 483-1975; or Dick Reed, plant phone 3-1801 or Oak Ridge 483-3458.

COMPANY SERVICE — 20-25-30

PADUCAH

25 YEARS

Donald E. Gordanier.

20 YEARS

L.B. Woods, Ollie Woods, Clovic E. Green and Harry A. Cain.

Y-12 PLANT

20 YEARS

Richard T. Wyrick, Carl E. Wilkerson, Carl T. East, Malcolm W. Oldham, Taskell L. Dishman, Gayther C. Cook Jr., James R. Sheehan, Jack L. Armes, Cecil S. Brown, Bobby L. Powers, Ralph B. Zimmerman, Clarence E. Miller, James W. Dowell, Charles W. Stegall, William F. Hawkins, Clifton E. Stooksbury, Joseph J. Ashbury, Edward W. Farris and Earl Daughtery.

ORGDP

25 YEARS

Martha Arp and Jessie B. Arnold.

20 YEARS

Robert L. White and Evelyn R. Cummings, Emerson L. Arnold and John D. Hart.

ORNL

25 YEARS

Jerry D. Hutchins, Evelyn M. Hall, Kuykendoll P. Bayne, Vaughn L. Huskey, Julian H. Hackney, Samuel R. Buxton, Walter L. Howard Jr., Elvin C. Carter, Billie S. Sams and Charles W. Angel.

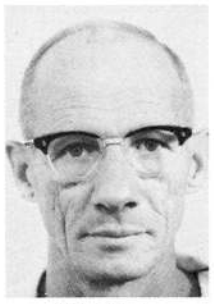
20 YEARS

Willie A. McCloud, Mildred E. Gregg, Floyd S. Adams, Joe L. Malone and Lewis C. Emerson.

Division deaths

Claborn C. Neeley, Y-12's Fabrication Division, died April 13 in an Oak Ridge hospital.

A native of Scott County, Va., he came with Union Carbide in 1948. He previously worked with Tennessee Eastman Corporation in Kingsport, and in Y-12.



Mr. Neeley

Survivors include his wife, Mrs. Leona S. Neeley, 100 South Beverly Circle, Oak Ridge; a son, Earl E. Neeley; a daughter, June Lenderman; his mother, Mrs. Ebbie Neeley; three brothers and two sisters, and seven grandchildren.

Funeral services were held at Beech Park Baptist Church, Oliver Springs, with the Rev. Jack Crass officiating. Burial followed in the Oak Ridge Memorial Park.

Rolester Dalton, Fabrication and Maintenance Division in the Paducah Plant, died in an auto accident March 29.

Mr. Dalton

Mr. Dalton is survived by his wife, Mrs. Barbara Dalton and son Rolester Jr., his father and several brothers and sisters. He lived in Wickliffe, Ky.

Funeral services were held at the Phillips-Milner Funeral Home with burial at Wickliffe.

FORMER ELECTRICIAN DIES

Charles B. Connelly, retired ORNL electrician, died April 15 in a Knoxville hospital. Originally from Lyle in Hickman County, Mr. Connelly had worked at ORNL for 26 years before his retirement in 1969. Survivors include his wife, Mrs. Dollie A.B. Connelly of Lenoir City, three daughters and three brothers. Funeral services were held at the Dickson Funeral Home with burial at Little Rock Cemetery in Lyle.

Duke's Oconee station topic for safety meet

Paul H. Barton, Manager for Technical and Nuclear Services, Duke Power Company, and an ORSORT graduate, will speak at the Nuclear Safety Information Center Seminar on Thursday, May 17 at 9:15 in the 4500 building's East Auditorium. His topic will be Preoperational and Startup Experiences at Duke Power's Oconee Nuclear Station.

Barton

The Oconee Nuclear Station, owned and operated by Duke Power Company, is located in northwestern South Carolina. The total output of the three-unit station utilizing Babcock & Wilcox pressurized water reactors is 2,658 MW, and is the first B&W nuclear steam supply system utilizing once-through steam generators to go in service. Barton will discuss the construction and preoperational startup testing programs, which have been plagued by a number of unusual occurrences that are unique in the industry. These occurrences, along with the fallout from the Calvert Cliffs case and the implementation of quality assurance requirements, delayed the startup of Oconee Unit 1 more than two years.

Barton has been with Duke Power for 25 years, and has held his present position since March, 1968. He has had experience in the design, construction, startup, and operation of both conventional and nuclear steam power plants, specializing in instrumentation, control, testing, and performance. His reactor experience has been with a number of reactors at Oak Ridge and the Westinghouse Reactor Evaluation Center, and with the CVNPA power reactor at Parr, S.C. Along with his design and operational experience with Duke Power's Oconee and McGuire Nuclear Stations, he has been involved in the related AEC licensing activities.

Join payroll savings and buy U.S. Savings Bonds on a regular, effortless schedule.

MEETS CONGRESSMAN — Thomas P. Jasny, left, Carbide Scholar from the Oak Ridge area, recently met his congressman, LaMar Baker, in his Washington office. Jasny, a senior at Oak Ridge High School, was attending the Washington Congressional Workshop. He is the son of George Jasny, director of engineering for the Nuclear Division.

CALENDAR of EVENTS

TECHNICAL

May 4

ORNL-NSF Environmental Program Seminar, "Some European Views on Energy and the Environment," D.J. Rose, professor of nuclear engineering, Massachusetts Institute of Technology. Building 4500-N, East Auditorium, 1:30 p.m.

May 7-8

Research and Development Safety Symposium: University of Tennessee Space Institute, Tullahoma, Tenn.

Physics Division Information Meeting: Oak Ridge National Laboratory.

May 9

Chemical Technology Division Seminar: "Effects of Chlorination on Polluted Waters," R.L. Jolley and W.W. Pitt. Central Auditorium, Building 4500N, 3 p.m.

May 16

Chemical Technology Division Seminar: "Tritium Separation Techniques for Controlled Thermonuclear Reactors," J.S. Watson, F.J. Smith and R.C. Forrester. Central Auditorium, Building 4500N, 3 p.m.

COMMUNITY

May 3

Oak Ridge Playhouse tryouts: "Fiddler on the Roof." 7:30 p.m. at the Playhouse.

May 4

Oak Ridge Playhouse presents: "Indians." Playhouse, 8:20 p.m. Other performances May 5, 11 and 12. Admission: adults $2.50; students $1.25.

HAVE YOU MOVED?

Moved? Make sure Personnel Records has an up-to-date, accurate address for you.

QUESTION BOX

(Continued from page 1)

Therefore, we split this activity into two leagues and separated the better teams from the others. We do not feel that bowling falls in this category, or any of the other activities where handicap systems are used to establish competitive equality.

No employee has been denied participation in any activity sponsored by the Recreation Department, and by keeping the professionalism and other dominating factors out of the program everyone can participate on an equal basis.

QUESTION: What are the chances of Union Carbide going to a four-day, 40-hour work week?

ANSWER: Although the four-day, 40-hour week has received a lot of publicity, only a small fraction of U.S. firms and only 100,000 employees are now working that schedule. Practically all of the companies involved are small ones, most of whom are not covered by the Walsh-Healy Public Contracts Act and therefore are not required to pay overtime for hours worked over eight in a day. Where the schedule has been adopted, results are still inconclusive.

Union Carbide has no plans to go to the four-day, 40-hour schedule in the foreseeable future.

CARBIDE BOWLING

The SASA's are still three points in the lead in the Carbide Family Mixed League, ahead of Team No. 2.

UNION CARBIDE

UNION CARBIDE CORPORATION
NUCLEAR DIVISION
P. O. BOX Y, OAK RIDGE, TENNESSEE 37830

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